UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/836,035	04/17/2001	Weichao G. Chen	PC10866AMGM	8768

7590 06/09/2004

Gregg C. Benson
Pfizer Inc.
Patent Department, MS 4159
Eastern Point Road
Groton, CT 06340

EXAMINER	
HUANG, EVELYN MEI	
ART UNIT	**PAPER NUMBER**
1625	

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/836,035	CHEN ET AL.	
	Examiner	Art Unit	
	Evelyn Huang	1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

eriod for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

tatus

1)☒ Responsive to communication(s) filed on *24 March 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29 and 31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29, 31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

riority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

ttachment(s)

) ☐ Notice of References Cited (PTO-892)

) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-29, 31 are pending. Claim 30 has been canceled according to the amendment filed on 11-16-2001.

Claim Rejections - 35 USC § 102

2. The rejection for Claims 1-29 under 35 U.S.C. 102(a) as being anticipated by Hamanaka (WO 99/43663, PTO-1449) is maintained for reasons of record.

Applicant submits that the 102 rejection is obviated by the exclusion of the precursor compound, [(5-cyclopropyl-1-quinolin-5-yl)-1H-pyrazole-4-carbonyl]-guanidine.

However, the rejection is not for the above precursor compound, that the exclusion of which would overcome the rejection. Rather, the rejection is based on inherent anticipation for the metabolite compound, namely, (5-cyclopropyl-1-(2-quinolone-5-yl)-1H-pyrazole-4-carbonyl]-guanidine.

Applicant argues that there is no inherent anticipation disclosed in the reference. However, inherent anticipation does not require that person of ordinary skill in art at relevant time would have recognized the inherent disclosure. Claimed invention may be inherently anticipated even if prior art supplies no express description of any part of claimed subject matter, since prior art reference that expressly or inherently contains each and every limitation of claimed subject matter anticipates. Schering Corp. v. Geneva Pharmaceuticals Inc., 67 USPQ2d 1664.

Claim Rejections - 35 USC § 103

3. Claims 1-29, 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamanaka (WO 99/43663, PTO-1449).

Applicant contends that the number of compounds within the subgenus of claim 102 is quite large to point to the 2-hydroxy substitution on the quinolinyl.

On the contrary, the subgenus recited in Hamanaka's claim 102 is the smallest preferred subgenus among big disclosed genus. At the time of the invention, one of ordinary skill in the art would be motivated to add the optional 2-hydroxy onto the quinolinyl of the [(5-cyclopropyl-1-quinolin-5-yl)-1H-pyrazole-4-carbonyl]-guanidine to arrive at the instant invention, with the reasonable expectation of obtaining an additional compound useful for treating ischemia, since Hamanaka had clearly taught that any species, especially those within the preferred genus, would be effective in reducing tissue damage resulting from tissue ischemia. In the absence of unexpected results, choosing one among many is prima facie obvious to one of ordinary skill in the art.

Applicant argues that the prior art precursor compound has been proviso out of the scope of the present application. Thus even if the compound of Hamanaka is metabolized to produce a compound within the instant, the disclosure made in the present is not available as a reference.

The declaration under 37 CFR 1.132 filed on 11-16-2001 shows the measurement of the plasma half-life and the advantageous longer plasma half-life of the instant quinolone compound over the precursor compound. However, any differences between the claimed invention and the prior art may be expected to result in some differences in properties. The issue is whether the properties differ to such an extent that the difference is really unexpected. In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). See MPEP 716.02. The results have be weighed in light of the disclosure and what is known in the art. Accordingly, the result is not unexpected in view of the disclosure that administration of the 5[-cyclopropyl-1-(quinolin-5-yl)-1-H-pyrazole-4-carbonyl]-guanidine (compound A) lead to the instant 5[-cyclopropyl-1-(quinolon-5-yl)-1-H-pyrazole-4-carbonyl]-guanidine (compound B) in vivo (admitted by the applicant in claim 30). Compound A is therefore a prodrug of compound B (claim 1, proviso) and one of ordinary skill would expect the precursor compound to have a shorter plasma half-life because it is being metabolized. Since unexpected results have not been established, the instant remains obvious over Hamanaka.

4. The 103(a) rejection for claims 1-29, 31 over Hamanaka in view of Munson and Beedham is maintained for reasons of record.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, while Munson only generically teaches the hydroxylation reaction as one of the possible metabolic pathways in the body, this text-book teaching serves to demonstrate that it is a well known metabolism. Furthermore, Beedham specifically teaches the oxidation of quinoline to 2-quinolone by an oxidase in the liver. Beedham's compound is not identical to but is similar to the instant quinolinyl compound, and one of ordinary skill in the art would expect the same oxidation reaction occurs in the instant quinolinyl compound.

The Declaration fails to render the instant unobvious for reasons set forth in the preceding paragraph. In the absence of unexpected results, the instant remains obvious over the prior art of record.

5. Claims 1-29, 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamanaka (WO 99/43663, PTO-1449) in view of Munson and Beedham as set forth in paragraph 6 of the previous office action is identical to the rejection of paragraph 4 of the previous office action, and it is a result of an error.

Double Patenting

6. Claims 1-29, 31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 52, 124-128 of U.S Patent N0. 6492401 (the US equivalent of Hamanaka, WO 99/43663). Although the conflicting claims are not identical, they are not patentably distinct from each other for reasons set forth in paragraphs 2, 3 above.

7. Claims 1-29, 31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 52, 124-128 of U.S Patent N0. 6492401 (the

US equivalent of Hamanaka, WO 99/43663) in view of Munson and Beedham. Although the conflicting claims are not identical, they are not patentably distinct from each other for reasons set forth in paragraph 4 above.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn Huang whose telephone number is 571-272-0686. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Evelyn Huang
Primary Examiner
Art Unit 1625